

Dmitry Budker

List of Publications by Year in descending order

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407
papers

19,356
citations

16451

64
h-index

16183

124
g-index

421
all docs

421
docs citations

421
times ranked

9156
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Expanding Nuclear Physics Horizons with the Gamma Factory. <i>Annalen Der Physik</i> , 2022, 534, . | 2.4 | 21 |
| 2 | Response of atomic spin-based sensors to magnetic and nonmagnetic perturbations. <i>Scientific Reports</i> , 2022, 12, 324. | 3.3 | 11 |
| 3 | From atomic physics, to upper-atmospheric chemistry, to cosmology: A laser photometric ratio star to calibrate telescopes at major observatories. <i>Natural Sciences</i> , 2022, 2, . | 2.1 | 1 |
| 4 | Precision Determination of Isotope Shifts in Ytterbium and Implications for New Physics. <i>Physical Review Letters</i> , 2022, 128, 073001. | 7.8 | 14 |
| 5 | Pseudovector and pseudoscalar spin-dependent interactions in atoms. <i>Physical Review A</i> , 2022, 105, . | 2.5 | 7 |
| 6 | Spectral signatures of axionlike dark matter. <i>Physical Review D</i> , 2022, 105, . | 4.7 | 15 |
| 7 | Infrasonic, Acoustic and Seismic Waves Produced by the Axion Quark Nuggets. <i>Symmetry</i> , 2022, 14, 459. | 2.2 | 10 |
| 8 | Millicharged Dark Matter Detection with Ion Traps. <i>PRX Quantum</i> , 2022, 3, . | 9.2 | 20 |
| 9 | Robust polarization gradient cooling of trapped ions. <i>New Journal of Physics</i> , 2022, 24, 043028. | 2.9 | 5 |
| 10 | Physics Opportunities with the Gamma Factory. <i>Annalen Der Physik</i> , 2022, 534, 2200004. | 2.4 | 2 |
| 11 | All-optical spin locking in alkali-metal-vapor magnetometers. <i>Physical Review A</i> , 2022, 105, . | 2.5 | 3 |
| 12 | Deep neural networks to recover unknown physical parameters from oscillating time series. <i>PLoS ONE</i> , 2022, 17, e0268439. | 2.5 | 1 |
| 13 | Do cities have a unique magnetic pulse?. <i>Journal of Applied Physics</i> , 2022, 131, . | 2.5 | 3 |
| 14 | Absolute optical chiral analysis using cavity-enhanced polarimetry. <i>Science Advances</i> , 2022, 8, . | 10.3 | 8 |
| 15 | Floquet Spin Amplification. <i>Physical Review Letters</i> , 2022, 128, . | 7.8 | 13 |
| 16 | Improved Bounds on Ultralight Scalar Dark Matter in the Radio-Frequency Range. <i>Physical Review Letters</i> , 2022, 129, . | 7.8 | 20 |
| 17 | Search for Dark-Matter-Induced Oscillations of Fundamental Constants Using Molecular Spectroscopy. <i>Physical Review Letters</i> , 2022, 129, . | 7.8 | 21 |
| 18 | Fundamentals of photoelectric readout of spin states in diamond. <i>Semiconductors and Semimetals</i> , 2021, , 105-147. | 0.7 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Singulettâ€Kontrastâ€Magnetresonanztomographie: Freisetzung der Hyperpolarisation durch den Metabolismus**. Angewandte Chemie, 2021, 133, 6866-6873. | 2.0 | 3 |
| 20 | Singletâ€Contrast Magnetic Resonance Imaging: Unlocking Hyperpolarization with Metabolism**. Angewandte Chemie - International Edition, 2021, 60, 6791-6798. | 13.8 | 28 |
| 21 | Zero- to Ultralow-Field NMR Spectroscopy of Small Biomolecules. Analytical Chemistry, 2021, 93, 3226-3232. | 6.5 | 29 |
| 22 | Action potentials induce biomagnetic fields in carnivorous Venus flytrap plants. Scientific Reports, 2021, 11, 1438. | 3.3 | 30 |
| 23 | Photoluminescence at the ground-state level anticrossing of the nitrogen-vacancy center in diamond: A comprehensive study. Physical Review B, 2021, 103, . | 3.2 | 16 |
| 24 | Lower than low: Perspectives on zero- to ultralow-field nuclear magnetic resonance. Journal of Magnetic Resonance, 2021, 323, 106886. | 2.1 | 26 |
| 25 | Floquet maser. Science Advances, 2021, 7, . | 10.3 | 36 |
| 26 | Ferromagnetic gyroscopes for tests of fundamental physics. Quantum Science and Technology, 2021, 6, 024006. | 5.8 | 12 |
| 27 | Gravity Probe Spin: Prospects for measuring general-relativistic precession of intrinsic spin using a ferromagnetic gyroscope. Physical Review D, 2021, 103, . | 4.7 | 18 |
| 28 | Imaging Topological Spin Structures Using Light-Polarization and Magnetic Microscopy. Physical Review Applied, 2021, 15, . | 3.8 | 18 |
| 29 | Battery Characterization via Eddy-Current Imaging with Nitrogen-Vacancy Centers in Diamond. Applied Sciences (Switzerland), 2021, 11, 3069. | 2.5 | 16 |
| 30 | Rapid hyperpolarization and purification of the metabolite fumarate in aqueous solution. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 54 |
| 31 | Correlation of high-field and zero- to ultralow-field NMR properties using 2D spectroscopy. Journal of Chemical Physics, 2021, 154, 144201. | 3.0 | 3 |
| 32 | Probing fast oscillating scalar dark matter with atoms and molecules. Quantum Science and Technology, 2021, 6, 034001. | 5.8 | 12 |
| 33 | Search for Axionlike Dark Matter Using Solid-State Nuclear Magnetic Resonance. Physical Review Letters, 2021, 126, 141802. | 7.8 | 51 |
| 34 | Intensity-correlated spiking of infrared and ultraviolet emission from sodium vapors. Optics Letters, 2021, 46, 2131. | 3.3 | 7 |
| 35 | Cross-relaxation studies with optically detected magnetic resonances in nitrogen-vacancy centers in diamond in external magnetic field. Physical Review B, 2021, 103, . | 3.2 | 3 |
| 36 | Resonance photoproduction of pionic atoms at the proposed Gamma Factory. Physical Review C, 2021, 103, . | 2.9 | 5 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Towards large-scale steady-state enhanced nuclear magnetization with in situ detection. <i>Magnetic Resonance in Chemistry</i> , 2021, 59, 1208-1215. | 1.9 | 8 |
| 38 | Photochemically Induced Dynamic Nuclear Polarization of Heteronuclear Singlet Order. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 4686-4691. | 4.6 | 12 |
| 39 | Dark matter searches using accelerometer-based networks. <i>Quantum Science and Technology</i> , 2021, 6, 034004. | 5.8 | 10 |
| 40 | Magnetic sensing at zero field with a single nitrogen-vacancy center. <i>Quantum Science and Technology</i> , 2021, 6, 034006. | 5.8 | 11 |
| 41 | A precise photometric ratio via laser excitation of the sodium layer – II. Two-photon excitation using lasers detuned from 589.16 and 819.71Ånm resonances. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 508, 4412-4428. | 4.4 | 4 |
| 42 | A precise photometric ratio via laser excitation of the sodium layer – I. One-photon excitation using 342.78Ånm light. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 508, 4399-4411. | 4.4 | 4 |
| 43 | Quantum sensitivity limits of nuclear magnetic resonance experiments searching for new fundamental physics. <i>Quantum Science and Technology</i> , 2021, 6, 034007. | 5.8 | 10 |
| 44 | Quantum technologies and the elephants. <i>Quantum Science and Technology</i> , 2021, 6, 040401. | 5.8 | 3 |
| 45 | Fiberized Diamond-Based Vector Magnetometers. <i>Frontiers in Photonics</i> , 2021, 2, . | 2.4 | 18 |
| 46 | Surpassing the Energy Resolution Limit with Ferromagnetic Torque Sensors. <i>Physical Review Letters</i> , 2021, 127, 070801. | 7.8 | 10 |
| 47 | Optically Enhanced Electric Field Sensing Using Nitrogen-Vacancy Ensembles. <i>Physical Review Applied</i> , 2021, 16, . | 3.8 | 22 |
| 48 | Emergent hydrodynamics in a strongly interacting dipolar spin ensemble. <i>Nature</i> , 2021, 597, 45-50. | 27.8 | 37 |
| 49 | Rapid parameter estimation of discrete decaying signals using autoencoder networks. <i>Machine Learning: Science and Technology</i> , 2021, 2, 045024. | 5.0 | 0 |
| 50 | Determination of local defect density in diamond by double electron-electron resonance. <i>Physical Review B</i> , 2021, 104, . | 3.2 | 10 |
| 51 | Constant-adiabaticity ultralow magnetic field manipulations of parahydrogen-induced polarization: application to an AA'X spin system. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 7125-7134. | 2.8 | 18 |
| 52 | Demonstration of diamond nuclear spin gyroscope. <i>Science Advances</i> , 2021, 7, eabl3840. | 10.3 | 22 |
| 53 | Stand-Off Magnetometry with Directional Emission from Sodium Vapors. <i>Physical Review Letters</i> , 2021, 127, 173605. | 7.8 | 10 |
| 54 | Search for axion-like dark matter with spin-based amplifiers. <i>Nature Physics</i> , 2021, 17, 1402-1407. | 16.7 | 47 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 55 | Search for exotic spin-dependent interactions with a spin-based amplifier. <i>Science Advances</i> , 2021, 7, eabi9535. | 10.3 | 31 |
| 56 | Intensity spiking and oscillation in frequency-upconverted field from four-wave mixing in rubidium vapor. , 2021, , . | | 0 |
| 57 | Stochastic fluctuations of bosonic dark matter. <i>Nature Communications</i> , 2021, 12, 7321. | 12.8 | 59 |
| 58 | Search for topological defect dark matter with a global network of optical magnetometers. <i>Nature Physics</i> , 2021, 17, 1396-1401. | 16.7 | 42 |
| 59 | Two-dimensional single- and multiple-quantum correlation spectroscopy in zero-field nuclear magnetic resonance. <i>Journal of Magnetic Resonance</i> , 2020, 318, 106781. | 2.1 | 9 |
| 60 | Atomic Physics Studies at the Gamma Factory at CERN. <i>Annalen Der Physik</i> , 2020, 532, 2000204. | 2.4 | 33 |
| 61 | Rapid Online Solid-State Battery Diagnostics with Optically Pumped Magnetometers. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 7864. | 2.5 | 9 |
| 62 | Axion quark nuggets and how a global network can discover them. <i>Physical Review D</i> , 2020, 101, . | 4.7 | 20 |
| 63 | Detection of the Lowest-Lying Odd-Parity Atomic Levels in Actinium. <i>Physical Review Letters</i> , 2020, 125, 073001. | 7.8 | 8 |
| 64 | Sensitive magnetometry in challenging environments. <i>AVS Quantum Science</i> , 2020, 2, . | 4.9 | 56 |
| 65 | Atomic and molecular transitions induced by axions via oscillating nuclear moments. <i>Physical Review D</i> , 2020, 101, . | 4.7 | 4 |
| 66 | Continuous-wave cavity ring-down polarimetry. <i>Journal of Chemical Physics</i> , 2020, 152, 164202. | 3.0 | 10 |
| 67 | Sensitive magnetometry reveals inhomogeneities in charge storage and weak transient internal currents in Li-ion cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 10667-10672. | 7.1 | 43 |
| 68 | A network of superconducting gravimeters as a detector of matter with feeble nongravitational coupling. <i>European Physical Journal D</i> , 2020, 74, 1. | 1.3 | 5 |
| 69 | Chemical Reaction Monitoring using Zero-Field Nuclear Magnetic Resonance Enables Study of Heterogeneous Samples in Metal Containers. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17026-17032. | 13.8 | 26 |
| 70 | Chemical Reaction Monitoring using Zero-Field Nuclear Magnetic Resonance Enables Study of Heterogeneous Samples in Metal Containers. <i>Angewandte Chemie</i> , 2020, 132, 17174-17180. | 2.0 | 0 |
| 71 | Relaxion stars and their detection via atomic physics. <i>Communications Physics</i> , 2020, 3, . | 5.3 | 114 |
| 72 | Development of a recoil ion source providing slow Th ions including $^{229}(\text{m})\text{Th}$ in a broad charge state distribution. <i>Hyperfine Interactions</i> , 2020, 241, 1. | 0.5 | 6 |

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|----|--|------|-----------|
| 73 | Analysis method for detecting topological defect dark matter with a global magnetometer network. <i>Physics of the Dark Universe</i> , 2020, 28, 100494. | 4.9 | 23 |
| 74 | Microwave-Free Vector Magnetometry with Nitrogen-Vacancy Centers along a Single Axis in Diamond. <i>Physical Review Applied</i> , 2020, 13, . | 3.8 | 36 |
| 75 | Fast Apparent Oscillations of Fundamental Constants. <i>Annalen Der Physik</i> , 2020, 532, 1900566. | 2.4 | 8 |
| 76 | Zero- to ultralow-field nuclear magnetic resonance J-spectroscopy with commercial atomic magnetometers. <i>Journal of Magnetic Resonance</i> , 2020, 314, 106723. | 2.1 | 36 |
| 77 | Overview of the Cosmic Axion Spin Precession Experiment (CASPER). <i>Springer Proceedings in Physics</i> , 2020, , 105-121. | 0.2 | 31 |
| 78 | Searching for Earth/Solar axion halos. <i>Journal of High Energy Physics</i> , 2020, 2020, 1. | 4.7 | 20 |
| 79 | Robust optical readout and characterization of nuclear spin transitions in nitrogen-vacancy ensembles in diamond. <i>Physical Review Research</i> , 2020, 2, . | 3.6 | 14 |
| 80 | Molecular parity nonconservation in nuclear spin couplings. <i>Physical Review Research</i> , 2020, 2, . | 3.6 | 11 |
| 81 | Frequency chirped continuous-wave sodium laser guide stars: modeling and optimization. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2020, 37, 1208. | 2.1 | 8 |
| 82 | Spiking dynamics of frequency upconverted field generated in continuous-wave excited rubidium vapors. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2020, 37, 2430. | 2.1 | 8 |
| 83 | Evidence for degenerate mirrorless lasing in alkali metal vapor: forward beam magneto-optical experiment. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2019, 52, 195003. | 1.5 | 2 |
| 84 | Roadmap on STIRAP applications. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2019, 52, 202001. | 1.5 | 108 |
| 85 | Isotopic variation of parity violation in atomic ytterbium: Description of the measurement method and analysis of systematic effects. <i>Physical Review A</i> , 2019, 100, . | 2.5 | 1 |
| 86 | Prospects of SPIN Gyroscopes Based on Nitrogen-Vacancy Centers in Diamond. , 2019, , . | | 0 |
| 87 | Extreme nuclear magnetic resonance: Zero field, single spins, dark matter. <i>Journal of Magnetic Resonance</i> , 2019, 306, 66-68. | 2.1 | 6 |
| 88 | Zero-field nuclear magnetic resonance of chemically exchanging systems. <i>Nature Communications</i> , 2019, 10, 3002. | 12.8 | 36 |
| 89 | Zero-Field Magnetometry Based on Nitrogen-Vacancy Ensembles in Diamond. <i>Physical Review Applied</i> , 2019, 11, . | 3.8 | 58 |
| 90 | Wu et al. Reply:. <i>Physical Review Letters</i> , 2019, 123, 169002. | 7.8 | 2 |

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| 91 | Constraints on bosonic dark matter from ultralow-field nuclear magnetic resonance. <i>Science Advances</i> , 2019, 5, eaax4539. | 10.3 | 75 |
| 92 | Hyperfine level structure in nitrogen-vacancy centers near the ground-state level anticrossing. <i>Physical Review B</i> , 2019, 100, . | 3.2 | 14 |
| 93 | Dependence of atomic parity-violation effects on neutron skins and new physics. <i>Physical Review C</i> , 2019, 100, . | 2.9 | 13 |
| 94 | Scalar Dark Matter in the Radio-Frequency Band: Atomic-Spectroscopy Search Results. <i>Physical Review Letters</i> , 2019, 123, 141102. | 7.8 | 38 |
| 95 | Eddy-Current Imaging with Nitrogen-Vacancy Centers in Diamond. <i>Physical Review Applied</i> , 2019, 11, . | 3.8 | 24 |
| 96 | System for control of polarization state of light and generation of light with continuously rotating linear polarization. <i>Review of Scientific Instruments</i> , 2019, 90, 013110. | 1.3 | 4 |
| 97 | Magnetic Gradiometer for the Detection of Zero- to Ultralow-Field Nuclear Magnetic Resonance. <i>Physical Review Applied</i> , 2019, 11, . | 3.8 | 22 |
| 98 | Constraining Exotic Interactions. <i>Annalen Der Physik</i> , 2019, 531, 1800273. | 2.4 | 7 |
| 99 | Search for Axionlike Dark Matter with a Liquid-State Nuclear Spin Comagnetometer. <i>Physical Review Letters</i> , 2019, 122, 191302. | 7.8 | 79 |
| 100 | Sawtooth-wave adiabatic-passage slowing of dysprosium. <i>Physical Review A</i> , 2019, 99, . | 2.5 | 10 |
| 101 | A network of magnetometers for multi-scale urban science and informatics. <i>Geoscientific Instrumentation, Methods and Data Systems</i> , 2019, 8, 129-138. | 1.6 | 7 |
| 102 | Polarization transfer via field sweeping in parahydrogen-enhanced nuclear magnetic resonance. <i>Journal of Chemical Physics</i> , 2019, 150, 174202. | 3.0 | 46 |
| 103 | The Revised SI: Fundamental Constants, Basic Physics and Units. <i>Annalen Der Physik</i> , 2019, 531, 1900148. | 2.4 | 2 |
| 104 | A Hypothetical Effect of the Maxwell-Proca Electromagnetic Stresses on Galaxy Rotation Curves. <i>Astrophysical Journal</i> , 2019, 871, 218. | 4.5 | 9 |
| 105 | Dynamics of a Ferromagnetic Particle Levitated over a Superconductor. <i>Physical Review Applied</i> , 2019, 11, . | 3.8 | 32 |
| 106 | Catching, trapping and in-situ-identification of thorium ions inside Coulomb crystals of 40Ca^+ ions. <i>Hyperfine Interactions</i> , 2019, 240, 1. | 0.5 | 7 |
| 107 | Interference-assisted resonant detection of axions. <i>Physics of the Dark Universe</i> , 2019, 24, 100272. | 4.9 | 6 |
| 108 | Revisiting spin-dependent forces mediated by new bosons: Potentials in the coordinate-space representation for macroscopic- and atomic-scale experiments. <i>Physical Review A</i> , 2019, 99, . | 2.5 | 57 |

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| 109 | Trapping and sympathetic cooling of single thorium ions for spectroscopy. Physical Review A, 2019, 99, . | 2.5 | 25 |
| 110 | Noncovalent force spectroscopy using wide-field optical and diamond-based magnetic imaging. Journal of Applied Physics, 2019, 126, 194502. | 2.5 | 3 |
| 111 | Real-Time Nuclear Magnetic Resonance Detection of Fumarase Activity Using Parahydrogen-Hyperpolarized [¹³ C]Fumarate. Journal of the American Chemical Society, 2019, 141, 20209-20214. | 13.7 | 50 |
| 112 | Direct limits on the interaction of antiprotons with axion-like dark matter. Nature, 2019, 575, 310-314. | 27.8 | 47 |
| 113 | Isotopic variation of parity violation in atomic ytterbium. Nature Physics, 2019, 15, 120-123. | 16.7 | 43 |
| 114 | Comment on Sensitivity Coefficients to Variation of Fundamental Constants. Annalen Der Physik, 2019, 531, 1800254. | 2.4 | 10 |
| 115 | Color Centers in Diamond as Novel Probes of Superconductivity. Journal of Superconductivity and Novel Magnetism, 2019, 32, 85-95. | 1.8 | 18 |
| 116 | Infrared laser threshold magnetometry with a NV doped diamond intracavity etalon. Optics Express, 2019, 27, 1706. | 3.4 | 22 |
| 117 | Polychromatic, continuous-wave mirrorless lasing from monochromatic pumping of cesium vapor. Optics Letters, 2019, 44, 3657. | 3.3 | 17 |
| 118 | Gamma Factory at CERN -- Novel Research Tools Made of Light. Acta Physica Polonica B, 2019, 50, 1191. | 0.8 | 11 |
| 119 | Polarization-driven spin precession of mesospheric sodium atoms: publisher's note. Optics Letters, 2019, 44, 138. | 3.3 | 1 |
| 120 | Microwave-free vector magnetometry based on nitrogen vacancy ensembles in diamond. , 2019, , . | | 0 |
| 121 | Zero-field magnetometry based on nitrogen-vacancy ensembles in diamond. , 2019, , . | | 0 |
| 122 | Nondestructive in-line sub-picomolar detection of magnetic nanoparticles in flowing complex fluids. Scientific Reports, 2018, 8, 3491. | 3.3 | 25 |
| 123 | Probing New Long-Range Interactions by Isotope Shift Spectroscopy. Physical Review Letters, 2018, 120, 091801. | 7.8 | 106 |
| 124 | Spin ensemble-based AC magnetometry using concatenated dynamical decoupling at low temperatures. Journal of Optics (United Kingdom), 2018, 20, 024008. | 2.2 | 10 |
| 125 | Low-energy Tests of Fundamental Physics. European Review, 2018, 26, 82-89. | 0.7 | 1 |
| 126 | Suppression of the Nonlinear Zeeman Effect and Heading Error in Earth-Field-Range Alkali-Vapor Magnetometers. Physical Review Letters, 2018, 120, 033202. | 7.8 | 40 |

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|-----|--|------|-----------|
| 127 | Searching for axion stars and Q -balls with a terrestrial magnetometer network. Physical Review D, 2018, 97, . | 4.7 | 42 |
| 128 | The cosmic axion spin precession experiment (CASPER): a dark-matter search with nuclear magnetic resonance. Quantum Science and Technology, 2018, 3, 014008. | 5.8 | 48 |
| 129 | Spin-lattice relaxation of individual solid-state spins. Physical Review B, 2018, 97, . | 3.2 | 31 |
| 130 | Resonant detection and production of axions with atoms. International Journal of Modern Physics A, 2018, 33, 1844030. | 1.5 | 10 |
| 131 | Coherent axion-photon transformations in the forward scattering on atoms. Physical Review D, 2018, 98, . | 4.7 | 3 |
| 132 | Imaging the Local Charge Environment of Nitrogen-Vacancy Centers in Diamond. Physical Review Letters, 2018, 121, 246402. | 7.8 | 84 |
| 133 | Remote sensing of geomagnetic fields and atomic collisions in the mesosphere. Nature Communications, 2018, 9, 3981. | 12.8 | 32 |
| 134 | Quantitative measurements of non-covalent interactions with diamond based magnetic imaging. Applied Physics Letters, 2018, 113, . | 3.3 | 4 |
| 135 | Characterization of the global network of optical magnetometers to search for exotic physics (GNOME). Physics of the Dark Universe, 2018, 22, 162-180. | 4.9 | 48 |
| 136 | High magnetic fields for fundamental physics. Physics Reports, 2018, 765-766, 1-39. | 25.6 | 87 |
| 137 | Wide-Field Imaging of Superconductor Vortices with Electron Spins in Diamond. Physical Review Applied, 2018, 10, . | 3.8 | 36 |
| 138 | Constraints on Exotic Spin-Dependent Interactions Between Matter and Antimatter from Antiprotonic Helium Spectroscopy. Physical Review Letters, 2018, 120, 183002. | 7.8 | 36 |
| 139 | Search for new physics with atoms and molecules. Reviews of Modern Physics, 2018, 90, . | 45.6 | 902 |
| 140 | On the Possibility of Miniature Diamond-Based Magnetometers Using Waveguide Geometries. Micromachines, 2018, 9, 276. | 2.9 | 14 |
| 141 | Nuclear-Spin Comagnetometer Based on a Liquid of Identical Molecules. Physical Review Letters, 2018, 121, 023202. | 7.8 | 30 |
| 142 | Lineshape-asymmetry elimination in weak atomic transitions driven by an intense standing wave field. Optics Letters, 2018, 43, 2241. | 3.3 | 6 |
| 143 | Experimental benchmarking of quantum control in zero-field nuclear magnetic resonance. Science Advances, 2018, 4, eaar6327. | 10.3 | 36 |
| 144 | Application of spin-exchange relaxation-free magnetometry to the Cosmic Axion Spin Precession Experiment. Physics of the Dark Universe, 2018, 19, 27-35. | 4.9 | 50 |

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|-----|--|------|-----------|
| 145 | Studies towards a directional polychromatic sodium laser guide star. , 2018, , . | | 5 |
| 146 | Continuous-wave mirrorless lasing at $221\frac{1}{4}\mu\text{m}$ in sodium vapors. Optics Letters, 2018, 43, 5279. | 3.3 | 16 |
| 147 | Polarization-driven spin precession of mesospheric sodium atoms. Optics Letters, 2018, 43, 5825. | 3.3 | 10 |
| 148 | Prospects of Spin Gyroscopes Based on Nitrogen-Vacancy Centers in Diamond. , 2018, , . | | 0 |
| 149 | Simulations of continuous-wave sodium laser guide stars with polarization modulation at Larmor frequency. , 2018, , . | | 0 |
| 150 | Optical quenching and recovery of photoconductivity in single-crystal diamond. Applied Physics Letters, 2017, 110, . | 3.3 | 11 |
| 151 | Towards improved measurements of parity violation in atomic ytterbium. Hyperfine Interactions, 2017, 238, 1. | 0.5 | 11 |
| 152 | Investigation of two-frequency Paul traps for antihydrogen production. Hyperfine Interactions, 2017, 238, 1. | 0.5 | 13 |
| 153 | Level anti-crossing magnetometry with color centers in diamond. Proceedings of SPIE, 2017, , . | 0.8 | 10 |
| 154 | ¹³ C-Decoupled <i>J</i> -Coupling Spectroscopy Using Two-Dimensional Nuclear Magnetic Resonance at Zero-Field. Journal of Physical Chemistry Letters, 2017, 8, 1512-1516. | 4.6 | 20 |
| 155 | Characterization of high-temperature performance of cesium vapor cells with anti-relaxation coating. Journal of Applied Physics, 2017, 121, . | 2.5 | 32 |
| 156 | Constraints on exotic spin-dependent interactions between electrons from helium fine-structure spectroscopy. Physical Review A, 2017, 95, . | 2.5 | 49 |
| 157 | Measuring molecular parity nonconservation using nuclear-magnetic-resonance spectroscopy. Physical Review A, 2017, 96, . | 2.5 | 16 |
| 158 | Miniature Cavity-Enhanced Diamond Magnetometer. Physical Review Applied, 2017, 8, . | 3.8 | 69 |
| 159 | Invited Review Article: Instrumentation for nuclear magnetic resonance in zero and ultralow magnetic field. Review of Scientific Instruments, 2017, 88, 091101. | 1.3 | 83 |
| 160 | A method for measurement of spin-spin couplings with sub-mHz precision using zero- to ultralow-field nuclear magnetic resonance. Journal of Magnetic Resonance, 2017, 284, 66-72. | 2.1 | 19 |
| 161 | Solution nuclear magnetic resonance spectroscopy on a nanostructured diamond chip. Nature Communications, 2017, 8, 188. | 12.8 | 60 |
| 162 | Magnetometry with Nitrogen-Vacancy Centers in Diamond. Smart Sensors, Measurement and Instrumentation, 2017, , 553-576. | 0.6 | 19 |

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|-----|---|-----|-----------|
| 163 | Is light narrowing possible with dense-vapor paraffin coated cells for atomic magnetometers?. AIP Advances, 2017, 7, . | 1.3 | 8 |
| 164 | Parametric wave mixing enhanced by velocity-insensitive two-photon excitation in Rb vapor. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1016. | 2.1 | 23 |
| 165 | Hybrid optical pumping of K and Rb atoms in a paraffin coated vapor cell. Optics Letters, 2017, 42, 4163. | 3.3 | 9 |
| 166 | Investigation of antirelaxation wall coatings beyond melting temperatures. , 2017, , . | | 1 |
| 167 | Tailorable dispersion in a four-wave mixing laser. Optics Letters, 2017, 42, 2846. | 3.3 | 5 |
| 168 | Vector light shift averaging in paraffin-coated alkali vapor cells. Optics Express, 2016, 24, 15383. | 3.4 | 17 |
| 169 | Comparison between observation and simulation of sodium LGS return flux with a 20W CW laser on Tenerife. Proceedings of SPIE, 2016, , . | 0.8 | 5 |
| 170 | Forty years after the first dark resonance experiment: an overview of the COSMA project results. Proceedings of SPIE, 2016, , . | 0.8 | 0 |
| 171 | Search for the Effect of Massive Bodies on Atomic Spectra and Constraints on Yukawa-Type Interactions of Scalar Particles. Physical Review Letters, 2016, 117, 271601. | 7.8 | 37 |
| 172 | Eddy current imaging with an atomic radio-frequency magnetometer. Applied Physics Letters, 2016, 108, . | 3.3 | 51 |
| 173 | Dichroic atomic vapor laser lock with multi-gigahertz stabilization range. Review of Scientific Instruments, 2016, 87, 063107. | 1.3 | 13 |
| 174 | Microwave-free magnetometry with nitrogen-vacancy centers in diamond. Applied Physics Letters, 2016, 109, . | 3.3 | 88 |
| 175 | Raman and nuclear magnetic resonance investigation of alkali metal vapor interaction with alkene-based anti-relaxation coating. Journal of Chemical Physics, 2016, 144, 094707. | 3.0 | 7 |
| 176 | On-Sky Tests of a High-Power Pulsed Laser for Sodium Laser Guide Star Adaptive Optics. Journal of Astronomical Instrumentation, 2016, 05, 1650001. | 1.5 | 6 |
| 177 | Optically detected magnetic resonances of nitrogen-vacancy ensembles in C_{13} -enriched diamond. Physical Review B, 2016, 94, . | 3.2 | 6 |
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